

CLAIMS

1. A hybrid system comprising:

a fuel cell unit that generates electricity upon being supplied with a reaction gas;

an electricity storage device that stores electric power generated by the fuel cell unit;

an electric power load; and

an electric power control device that controls distribution of electric power supplied to the electric power load from the fuel cell unit and the electricity storage device,

wherein the electricity storage device has a capacity characteristic of being able to supply a requested amount of electric power of the electric power load at least during an early stage following restart of operation of the fuel cell unit from a state of pause of operation.

2. A hybrid system comprising:

a fuel cell unit that generates electricity upon being supplied with a reaction gas;

an electricity storage device that stores electric power generated by the fuel cell unit;

an electric power control device that controls distribution of electric power supplied to the electric power load from the fuel cell unit and the electricity storage device;

an electric power load; and

a control portion that controls operation of the fuel cell unit,

wherein upon detecting a requested amount of electric power that is higher than a predetermined value during a pause of operation of the fuel cell unit, the control portion performs an operation control so that the fuel cell unit restarts operation, and controls the electric power control device so that the requested amount of electric power is supplied to the electric power load only from the electricity storage device at least during an early stage following a beginning of restart of the operation of the fuel cell unit.

3. The hybrid system according to claim 1 or 2, wherein the electricity storage device has a capacity characteristic of being able to supply the electric power load with a maximum electric power consumed by the electric power load at least during the early

stage following the restart of the operation of the fuel cell unit.

4. The hybrid system according to any one of claims 1 to 3, wherein the electric power load includes a traction motor for driving a vehicle, and an accessory of the fuel cell unit.

5. The hybrid system according to any one of claims 1 to 4, wherein the early stage following restart of operation is a period that continues from the restart of the operation of the fuel cell unit until the fuel cell unit recovers an I-V characteristic of a steady state.

6. The hybrid system according to any one of claims 1 to 5, wherein the pause of operation of the fuel cell unit includes a pause that occurs during an intermittent operation state of the fuel cell unit.

7. A control method for a hybrid system that has a fuel cell unit that generates electricity upon being supplied with a reaction gas, an electricity storage device that stores electric power generated by the fuel cell unit, and an electric power load, and that supplies an electric power from the fuel cell unit and an electricity storage device, comprising:

determining whether the requested amount of electric power of the electric power load is higher than a predetermined value during a pause of operation of the fuel cell unit;

performing an operation control so that the fuel cell unit restarts operation if it is determined that the requested amount of electric power of the electric power load is higher than the predetermined value; and

supplying the requested amount of electric power to the electric power load only from the electricity storage device at least during an early stage following a beginning of restart of the operation of the fuel cell unit.